Mid-Atlantic Harbor Porpoise Take Reduction Team
November 28-30, 2000

Final Meeting Summary and Take Reduction Team Recommendations

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MEETING SUMMARY
MID-ATLANTIC HARBOR PORPOISE TAKE REDUCTION TEAM
NOVEMBER 28-30, 2000

Agenda Item 1 -- Introduction & Meeting Objectives

Patricia A. Kurkul, the National Marine Fisheries Service (NMFS) Northeast Regional Administrator, welcomed all the Mid-Atlantic Take reduction Team (TRT or Team) participants[1] and thanked them for their role in helping to reduce harbor porpoise bycatch in the Mid-Atlantic to below the Potential Biological Removal (PBR) level. She noted that the estimated bycatch in the Mid-Atlantic coastal gillnet fishery decreased from about 450 in 1998 to about 50 in 1999. Furthermore, based on the new survey information from 1999, the PBR for harbor porpoise will increase.

Ms. Kurkul indicated that it will not be possible to develop and implement a plan that will reduce harbor porpoise bycatch to the Zero Mortality Rate Goal (ZMRG) by April 30, 2001, as specified in Section 118(a)(1) of the Marine Mammal Protection Act (MMPA). Instead, NMFS is proposing a target date of December 2, 2003, which is 5 years from the date of implementation of the Harbor Porpoise Take Reduction Plan (HPTRP). [The five-year timeframe is another statutory goal specified in MMPA Section 118(a)(2).] She urged the TRT to focus its deliberations at this juncture on the development of recommendations[2] that would continue the progress in further reducing mortality and serious injury. Ms. Kurkul emphasized the problem areas that the TRT needs to address:

- Harbor porpoise takes were observed in the shad fishery and other small mesh fisheries during the past several years. Several of these subfisheries are not currently regulated by the HPTRP.
- Harbor porpoise takes could be occurring in many of the mid-Atlantic subfisheries where observer coverage is limited.
- Fishery management plan (FMP) regulations have contributed to the overall reduction of harbor porpoise take, but we must evaluate the degree to which FMP measures provide conservation benefits for harbor porpoise on a case-by-case basis. FMP measures do not necessarily yield a one-for-one exchange with harbor porpoise bycatch reduction measures.

Ms. Kurkul concluded by charging the Team with the task of examining possible new strategies that would continue the progress the HPTRP has made thus far in reducing bycatch with a focus

[1] A list of meeting participants is included in Attachment A.

[2] The Team s consensus recommendations are included in the body of this report with full justification and are also included in condensed format in Attachment D.

on revisiting the small mesh fisheries. She also urged the team to make recommendations on providing incentives for the fishing industry that can be built into the HPTRP to encourage further reduction of bycatch and development of improved fishing technology and methods.

Agenda Item 2 -- Review of Agenda & Process Groundrules

Alana Knaster, the lead facilitator from The Mediation Institute, reviewed the agenda. No changes were proposed. She referred the team to the revised process groundrules distributed in the meeting packet. The prior groundrules were changed to reflect the role of the team in the post-plan development phase.

Agenda Item 3 -- Update on Stock Assessment and Take Analysis

Stock Assessment Update & Report from the Atlantic Scientific Review Group. Debra Palka of the NMFS Northeast Fisheries Science Center (NEFSC) discussed the updates to the harbor porpoise stock assessment. (See the handout[3] entitled Overview of Harbor Porpoise Stock Assessment .) She noted the rise in the estimated abundance (to 89,700) and resulting change in PBR (from 483 to 747). However, she added that the apparent increase in abundance is due to new survey effort in areas that had not been previously surveyed. Therefore, additional surveys[4] are necessary over time to investigate whether there is an upward trend.

Dr. Palka reported that the Scientific Review Group (SRG), at their mid-November meeting, raised concerns regarding the new NMFS policy of adding stranding data into the total mortality estimate for the Mid-Atlantic coastal gillnet fishery. SRG members discussed several approaches for handling stranding data. Based on the SRG discussion, NMFS is considering assigning strandings involving definitive fishery interaction (net marks, line marks, etc.) -- but where no gear was actually recovered and the specific fishery responsible cannot be determined -- to an unknown fishery. The fishery interaction stranding records are included in the total mortality estimate which is counted against PBR, but are not extrapolated. This is in contrast to observed takes, which are extrapolated to the total fishing effort.

Dr. Palka concluded with a brief update of current research on harbor porpoise stock structure. To date, there are no conclusive findings that can be used by the TRT. For the present, NMFS will continue to assume that all animals caught in U.S. fisheries are from the Gulf of Maine/Bay of Fundy (GOM/BOF) stock. However, it is important to note that genetic analysis to date has identified a fair proportion of animals from the Mid-Atlantic that apparently come from a

[3] A list of background materials distributed prior to and during the meeting is included in Attachment B.

[4] NMFS rotates surveys for the different marine mammal stocks approximately every three years; accordingly the next harbor porpoise survey would be tentatively scheduled for 2002.

population that has not yet been identified and whose relation to the GOM/BOF stock is unknown. Future results of stock structure research will be reviewed by the SRG as they become available for incorporation into the Stock Assessment Report and the NMFS management process. (See the handout entitled Genetic Structure of Harbor Porpoise .)

Take Analysis. Marjorie Rossman of the NEFSC first summarized the approach utilized by the NEFSC to estimate bycatch and then provided an overview on the take analysis for 1999 and the first part of 2000. The following is a summary of the information presented to the TRT. For further detail, see the handouts entitled Methodology Used to Estimate By-catch and Characteristics of hauls with porpoise takes and not targeting monkfish and dogfish .

During 1999, three harbor porpoises were observed taken during March off Maryland in hauls that were targeting shad using nets with twine sizes smaller than those currently regulated by the HPTRP. Based on these data, the preliminary total bycatch estimate for the Mid-Atlantic coastal gillnet fishery for 1999 was 53 (CV=0.49) animals. Because takes were only observed in the stratum which includes Maryland, the only effort data used to extrapolate the 3 takes was from the same stratum. The extrapolated 1999 estimate for the Northeast sink gillnet fishery was 270 (CV=0.28) animals. Canadian serious injury/mortality included 20 (CV=unknown) from the sink gillnet fishery and 3 (CV=0) from the herring weir fishery. An additional 20 serious injury/mortalities attributable to human interaction were recorded from the stranding data; these data cannot be extrapolated but were added to the total estimate for 1999. The TRT noted that the total bycatch from 1999 was less than both the old PBR of 483 and the new PBR of 747.

During the winter season of 2000 (*i.e.*, January-May), there was one observed harbor porpoise take in the Mid-Atlantic coastal gillnet fishery. This animal was taken on a shad gillnet trip in state waters off Delaware in March. An extrapolated estimate for the winter in the Mid-Atlantic could not be prepared at this time, as the Delaware fishing effort data for state waters is not available until after the end of the year. The estimated bycatch for New England during Winter 2000 is 143 (CV=0.57) animals. For the summer season (June-August), no takes were observed in either New England or the Mid-Atlantic. The remaining period for 2000, the fall season (*i.e.*, September-December) was incomplete as of the date of this meeting. However, as of November 13, no additional harbor porpoise takes were observed in the Mid-Atlantic during the fall. As of November 13, there were 3 observed takes off New Hampshire in nets which were not in compliance with the pinger requirement of the HPTRP. The seasonal estimate for the fall of 2000 and the full-year/cumulative New England/Mid-Atlantic bycatch estimate for 2000 will be calculated when the remainder of the observer data and fishing effort data from 2000 are available. A preliminary estimate will be prepared in May 2001 pursuant to the harbor porpoise lawsuit settlement.

Ms. Rossman noted that the distribution of observer coverage seemed to correspond well, in a qualitative sense, to the pattern of effort across the fisheries, but that the coverage level was low relative to total fishing effort, particular for the drift gillnet category. (See the handout entitled Preliminary 1999 Observer Coverage of Sink Gillnet Fisheries .) She also noted that NMFS

recently realized that the classification of sink and drift gillnet trips in the observer data was not the same as that reflected in the landings data. As a result, the bycatch data were broken out slightly differently than in previous analyses presented to the TRT.

Following these presentations, the TRT engaged in an extensive discussion about data collection and analysis. The lag time in analyzing data as well as coordination in the analysis of FMP data as it relates to bycatch reduction were of primary concern. The TRT questioned whether it might be more appropriate to change the timing of their annual meetings to better correspond with the time of year when critical data will be available.

The TRT members also expressed concern that there is confusion about definitions of categories of gillnets. The Team emphasized the need for an agreement on the meaning of terms and standardization of their use among the states so that the bycatch can be calculated in a manner that enables the TRT to effectively discuss gear sectors within the Mid-Atlantic coastal gillnet fishery.

NMFS and Atlantic States Marine Fisheries Commission (ASMFC) staff informed the TRT that there is already an Atlantic Coastal Cooperative Statistics Program (ACCSP) subgroup, with NMFS participation, which has developed four gillnet gear definitions. The gear definitions will be used coastwide for effort data collection and analysis. However, it is uncertain when the ACCSP recommendations will be fully implemented by NMFS and all the coastal states. Furthermore, gear definitions are not the whole problem. The manner in which effort is reported is also critical. For example, effort from several types of gillnets may be reported in generic gillnet codes. In other words, precise gillnet codes may look good in theory but may be impracticable when effort is actually reported for a number of reasons.

> ***In light of this discussion, the TRT recommends that NMFS convene a subgroup of TRT members on fishing effort and gillnet gear definitions. This subgroup should include representation from staff of the appropriate agencies familiar with the ACCSP to advise NMFS regarding the transition from the old data format to the new format that is currently being developed and the ramifications for HPTRP monitoring.***

The TRT had a brief discussion regarding the use of different statistical approaches when the take level is low. As noted below in the observer program recommendations, when the number of observed takes decreases, the degree of statistical uncertainty increases. New data analysis approaches may be more effective than current approaches under these conditions. This is even more critical if the amount of observer coverage remains at low levels.

> ***Accordingly, the TRT recommends that NMFS investigate and apply appropriate analyses to estimate bycatch in fisheries where the catch rates are low or are***

considered a rare event, i.e., the delta method as explained by NEFSC staff.

In reviewing the bycatch patterns for the past several years, the TRT noted that the Mudhole closure area in the December 1998 final rule may not match the area that had been discussed by the TRT at its original meetings. NEFSC staff also noted that the current closure area may not be the best match for the bycatch patterns. NMFS indicated they will look into the history of the closure and report back to the TRT.

Status and Role of ZMRG. Emily Hanson of the NMFS Office of Protected Resources indicated that NMFS is currently using 10% of PBR as the default formula for calculating ZMRG. What is relevant to the team s deliberations this year, however, is that we continue to make progress in reducing mortality and serious injury. The intent is to eliminate as many takes as possible and take precautions to avoid mortality where reasonable. At this point, it is not known when NMFS might finalize a definition of ZMRG. However, Ms. Hanson noted that NMFS is planning further internal discussion both on the ZMRG policy and on strategic planning given limited anticipated resources.

Agenda Item 4 -- Status of the 1999 Recommendations

A. Observer Program and Marine Mammal Authorization Program

Observer Program. As noted in Agenda Item 3, the geographic and temporal distribution of observer coverage appears to be representative of the distribution of fishing effort that was recorded in 1999; however, the level of coverage has decreased from past years. Debra Palka indicated that, with lower levels of observer coverage and fewer total (*i.e.*, not just observed) takes, one is less likely to have the statistical power to reliably estimate the total bycatch. She added that, theoretically, 6% observer coverage is preferable if we do not know where the take is likely to occur, if the true take is 50 or below, and given the current level of reported landings. (See the handout entitled Probability of Detecting a Take .) In the past, 2% coverage was sufficient to obtain the necessary level of statistical certainty when the bycatch level was much higher.

Emily Hanson reported that $3.5 million has been earmarked for Atlantic Coast observer coverage in FY2001. During the next few months, a decision will be made as to how to allocate the funds and establish priorities. It is likely that observer coverage in the Mid-Atlantic coastal gillnet fishery will increase given this level of funding, but the amount of the increase is unknown at this time.

As noted above, the TRT s original recommendations to NMFS for the first stage of the HPTRP were designed for the monkfish and dogfish subfisheries within the Mid-Atlantic coastal gillnet fishery. Sufficient coverage with respect to the number and distribution of observed trips within

the entire Mid-Atlantic fishery is an ongoing concern of the TRT. Observer data is still the preferred source of representative and accurate data to guide decision making. Observer coverage is particularly needed in the smaller mesh subfisheries, but it is important that such an allocation should not jeopardize coverage levels in other subfisheries. Without sufficient coverage of all subfisheries, the TRT cannot rely on the observer data to accurately assess bycatch and develop future bycatch reduction strategies on a subfishery basis.

Because of the critical importance of the observer program to the ongoing work of the TRT in complying with the provisions of the MMPA, the Team made the following recommendations pertaining to coverage levels of the observer program in the Mid-Atlantic:

> ***The TRT recommends that NMFS increase funding for the observer program to increase the number of observed gillnet hauls in the Mid-Atlantic region. Assuming that the TRP continues to progress towards meeting its statutorily mandated long range goal[5], the level of observer coverage must be increased to provide the sampling power necessary to detect bycatch levels measuring in the tens of animals. Instead of increasing observer effort, however, coverage in recent years has decreased, leaving some fisheries unobserved or observed at such low levels as to make it impossible for the TRT to provide informed recommendations on the merit of further actions or alternatives to reduce bycatch. Between 1998 and 1999, observer coverage declined from 5% to 2% in the Mid-Atlantic region. Furthermore, the TRT was advised that the number of observer trips in 2000 remained at about 1999 levels. The TRT finds this level of coverage unacceptable and recommends that NMFS increase the annual coverage to at least 6% of overall gillnet fishing effort in the Mid-Atlantic region. The recommended level of observer coverage will also be essential to address bycatch reduction needs for bottlenose dolphins caught in many of the same fisheries.***
>
> ***The TRT acknowledges the existence of observed harbor porpoise takes during 1997, 1999 and 2000 in the tiny mesh fisheries (i.e., less than or equal to 5.0 mesh) operating off Delaware and Maryland during March 19-April 3. TRT members support an examination of the observer program to ensure that there is sufficient coverage for all areas and subfisheries to adequately characterize fisheries and determine the ramifications for the HPTRP. The TRT is particularly concerned about***

[5] Per the Marine Mammal Protection Act 16 U.S.C.1387, the long term goal of a take reduction plan shall be to reduce, within 5 years of its implementation, the incidental mortality or serious injury of marine mammals incidentally taken in the course of commercial fishing operations to insignificant levels approaching a zero mortality and serious injury rate, taking into account the economics of the fishery, the availability of existing technology, and existing State or regional fishery management plans.

inadequate observer coverage in areas where take appears to be a problem, as suggested by stranding data, and the TRT recommends that NMFS focus additional observer coverage in those areas.

The TRT also discussed the collection of biological samples by the observer program. In addition to general archiving for life history studies, the collection of tissue samples from observed takes would facilitate ongoing stock structure research involving the use of genetic markers. Accurate stock structure identification is critical to appropriate calculation of the PBR for the harbor porpoise stock(s) and therefore directly affects the HPTRP. In addition, tissue analysis is necessary to categorize mortality by stock for the purpose of monitoring the HPTRP.

The TRT recommends that the observer program institute procedures to ensure that tissue samples and/or whole carcasses are obtained in the event of any observed harbor porpoise take at sea.

Marine Mammal Authorization Program. Diane Borggaard of the NMFS/Southeast Regional Office presented information on the number of registrants in the Marine Mammal Authorization Program (MMAP). Registration of North Carolina fishermen in the MMAP has increased from 56 in 1998 to 161 in 1999. NMFS will be sending out another mailing in North Carolina and will target other states as well. Compliance with the requirement to take observers has significantly improved in the Mid-Atlantic. Since many of the vessels are too small to carry an observer, NMFS purchased a vessel that has been used as an alternative platform for observing these fishing vessels. It has been cost-effective because it allows observation of several vessels effort in one day, whereas the vast majority of on-board observers generally work on only one vessel in a day-long or multi-day trip.

B. Adjusting the Delaware Bay Line

Gregg Lamontagne of the NMFS/Northeast Regional Office reported that NMFS had proposed an amendment to the HPTRP exempting Delaware Bay from the current regulations in response to TRT recommendations at the prior meeting. The proposed rule was published on October 27, 2000, with a one-month comment period. NMFS received comments in favor of the rule and plans to publish the final rule prior to January 1, 2001.

C. Redefinition of the Small Mesh Fishery

Gregg Lamontagne informed the team that NMFS did not implement its recommendation from the January 2000 meeting regarding the small mesh fishery redefinition. Since there had been an observed take in a small mesh gillnet targeting shad this fishing season in Delaware, as well as prior observed takes in mesh 5" and less, NMFS concluded that an exemption was not appropriate. NMFS did ask for comments on this issue in the above-mentioned Delaware Bay proposed rule. (Refer to the *Federal Register/Vol. 65, No. 209/Friday, October 27, 2000/*

Proposed Rules, p.66416 for further details. Note: there is an error in Paragraph 2 in both Lines 16 and 22. Massachusetts should read Mid-Atlantic.)

NMFS staff reminded the TRT that the initial exclusion of the gillnet effort using gear with 5 inch and smaller mesh was only for the first year of the plan. Since we are well beyond the first year of the plan, the reasoning for excluding subfisheries targeting species other than monkfish or dogfish is moot. (This issue is discussed in the preamble to the December 2, 1998, final HPTRP rule).

The TRT noted that their initial recommendations for gear restrictions were designed explicitly with only the monkfish and dogfish fisheries in mind. Therefore, the application of these restrictions to other subfisheries within the Mid-Atlantic coastal gillnet fishery would likely be problematic because gear design is closely related to target species. Furthermore, there are a number of assumptions in the HPTRP regarding why and how mesh and twine size restrictions affect harbor porpoise bycatch. These assumptions have been developed based on a limited amount of observer data which is primarily from monkfish and dogfish trips. Therefore, the benefit of applying any type of gear restrictions to the smaller mesh fisheries is uncertain.

Bruce Halgren of the New Jersey Department of Environmental Protection reiterated the arguments for implementing the change in the HPTRP's small mesh definition. He emphasized that the ASMFC s Shad FMP encourages the harvest of larger females. By defining regulated small mesh gear as gear with greater than 5.0 mesh to less than 7.0 mesh in the HPTRP, NMFS has encouraged fishermen to direct effort at smaller shad. This is contrary to the objectives of the FMP. He also noted that the heavier twine requirement may result in higher mortality of striped bass, which would have been able to break through and thus escape from the lighter twine traditionally used. Mr. Halgren suggested that NMFS address the needs of the shad fishermen by making the change in the regulation, but simultaneously attempt to address concerns in a the small mesh fishery in a more direct fashion. NMFS tends to craft regulatory language in terms of gear rather than target species to promote enforceability. Given this strategy, several team members suggested that the TRT look at other causal factors that might be affecting take in the smaller mesh subfisheries with the intention of recommending amendments to the HPTRP to address these factors.

It was noted that very little observer data is available for this exercise. However, based upon the available records, causal factors might include the following:

- target species
- time of year - seasons
- length of soaks
- twine strength
- distance from shore

The Team considered a number of alternatives to address this issue including proposals that

would address mesh size from 4.5" to 5.5". However, in addressing concerns regarding takes in mesh smaller than 5.0", fishermen noted that there would be significant impacts to the mackerel fishery and possibly other subfisheries. In particular, a prohibition on overnight soaks would compromise the mackerel fishery. Other Team members noted that harbor porpoise takes have been observed in mesh sizes smaller than 4.5"; therefore, they were not comfortable at this time with a recommendation that would only address the 5.0"-5.5" increment.

After discussion of the above issues, the Team could not reach a consensus on modifications to the regulation with respect to mesh size. However, the Team did recommend an approach for addressing tiny mesh takes that might occur in the upcoming season. The Team believes that convening fishermen workshops may provide insight into why problems are occurring and may also yield suggested strategies for addressing a potentially serious problem. The following strategy also provides the TRT the opportunity to respond to new bycatch information in a timely fashion:

> ***The TRT recommends that, when and if NMFS observes a harbor porpoise take in a tiny mesh (less than or equal to 5.0 mesh) fishery, then the details of such take should be provided as soon as possible to the TRT for their consideration. If a second take event occurs, exceeding the 2000 level of non-extrapolated takes, then NMFS should convene a meeting of an appropriate subgroup of the MATRT to determine if focused fishermen workshops are warranted in the problem area(s). If additional takes occur, NMFS should convene the full TRT to address the issue.***

A non-consensus recommendation pertaining to the small mesh regulation was proposed by a number of Team members. This is provided in Attachment E.

In conclusion, the TRT agreed to consider this issue again as a priority at its next meeting.

D. Addressing Recreational Fishing Interactions

In response to the January 2000 TRT recommendations, the ASMFC reactivated the Protected Species Subcommittee of its Management and Science Committee. The subcommittee held a conference call to discuss options for implementing the TRT's recommendation to quantify interactions between recreational gear, harbor porpoise, and bottlenose dolphin. There are a number of difficulties that would have to be overcome to implement this recommendation. First, not all of the states license recreational fishermen, and some of those states that do license recreational fishermen do not differentiate between commercial and recreational fishing activity. In addition, although the ACCSP database does have some records of interaction between protected species and recreational gear, this information is qualitative rather than quantitative. Most importantly, however, the MMPA currently does not give NMFS the authority to regulate recreational fisheries through take reduction plans.

There is currently no observer program for recreational fisheries, and NMFS receives very few opportunistic reports of interactions with recreational gear. Recreational vessels are not covered by registration in the MMAP. Therefore, any takes that do occur in recreational gear would most likely be in violation of the take prohibitions of the MMPA unless they are authorized by a special incidental/small take permit. Although recreational fisheries do not have to comply with take reduction plans, Section 118(f)(6)(C) of the MMPA does require that take reduction team membership include representatives of any recreational fisheries whose operation results in serious injury/mortality of the marine mammal stock(s) in question.

The assessment of human impacts is independent of take reduction plan regulatory authority. Therefore, takes attributable to recreational fishing effort would be counted against PBR. Because the level of recreational take of harbor porpoise and bottlenose dolphins is unknown, however, the degree to which it would impact the burden on commercial fisheries restricted by take reduction plans for these species cannot be effectively measured. However, the effect of recreational takes is likely to be greatest when the allowable take level is low, whether at the PBR or ZMRG stage of a take reduction plan.

Emily Hanson noted that the Administration has proposed changes to the MMPA which would address recreational fisheries. Congress may consider these when it reconvenes; however, the viability of these proposals is uncertain given that the position of the new Administration on these issues is unknown at this time. NMFS staff indicated that there has been an ongoing effort to educate recreational fishermen concerning how to avoid marine mammal interaction. This effort will continue and hopefully be expanded in the future.

The Team reiterated its concern about the importance of ascertaining information on recreational fishing interaction with harbor porpoises. Data on the rates and characteristics of marine mammal incidental take in recreational fisheries is important for determining future strategies that would address recreational fishing impacts in the HPTRP, as appropriate.

> ***Accordingly, the TRT recommends that NMFS and the States continue investigations to quantify interactions between recreational gear and harbor porpoise and bottlenose dolphins.***
>
> ***The TRT also recommends that stranding network members be trained in a standardized fashion with regard to identifying and recording signs of fishery interactions and differentiating between various gear types where possible. Progress should be reported at the next MATRT meeting.***

E. TRT-NMFS Coordination

The TRT expressed frustration with the history of NMFS rulemaking with regard to the HPTRP, which they believe has not included sufficient TRT input. In particular, the Team believes that

they should have input into proposed actions prior to publication of the *Federal Register* notice announcing a proposed rule, particularly if the rule deviates significantly from the TRT recommendations which were intended for the action. Kevin Collins, NOAA General Counsel attorney for the NMFS/Northeast Region, informed the TRT that the MMPA does not require NMFS to seek TRT concurrence in approving a proposed regulation. However, he added that there is opportunity for team members to comment on a regulation during the comment period. TRT members reiterated their interpretation that the intent of the multi-stakeholder process established in Section 118 of the MMPA is for TRT members to play a direct role in reviewing draft and proposed regulations. TRT support is also critical to successful implementation of HPTRP regulations when they are finalized.

TRT input on a regulation that interprets a consensus recommendation is valuable for clearly and accurately capturing or clarifying the intent of the TRT and to help prevent any unanticipated problems that might emerge in crafting regulatory language (as happened with the decision to use 5-inch mesh as the upper bound for unregulated gear in the December 2, 1998, HPTRP final rule). In cases where NMFS is considering substantive modification of a TRT recommendation, TRT input on potential consequences of which NMFS may be unaware is also important.

Based upon a discussion of several options, the TRT developed the following recommendation which they believed to be consistent with NMFS legal authorities and mandates:

> ***The TRT Recommends that NMFS utilize several approaches for enhancing the ability of the TRT to provide input on the development of regulations pertaining to the Harbor Porpoise Take Reduction Plan (HPTRP). The TRT prefers that NMFS obtain input prior to the issuance of a Notice of Proposed Rulemaking (NPR) either by providing draft language for the TRT to review as part of the annual meeting and/or by convening the full team for the purpose of reviewing a proposed strategy or NPR. This consultation would take place in person or by conference call. The last, but least preferable, option would be to mail a copy of the NPR to all team members and convene the Team during the public comment period.***
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> ***The TRT acknowledges that NMFS may not be able to secure additional funding for convening the team to provide input on draft language or an NPR during a time frame that is outside of the normal meeting cycle.***

F. Net Tagging

Winnie Chan of the NMFS/Northeast Regional Office reported on the implementation of the net tagging requirement in the Mid-Atlantic. This requirement is designed to enhance enforceability of the net cap in the HPTRP. Pursuant to the December 1998 final HPTRP rule, tags were required as of January 2000. However, NMFS has not yet notified the fishing industry regarding

how to obtain tags. The agency hopes to have the net tagging program in place for the upcoming season. When the program is implemented, notification will be sent to all federal permit holders including a tag form that can be mailed in. NMFS will also require assistance from the states in notifying state-only permit holders. NMFS was planning on using the same pear-shaped gillnet tag that has been used for the Multispecies and Monkfish FMPs. The cost is expected to be approximately $1.05 per tag with a minimum order of 25.

Fishermen reported that they were experiencing problems with this type of tag in the Mid-Atlantic. Tags get hung up and cause backlash . In addition, the wide end of the pear-shaped tag, which is the portion with the number, tends to crack off. Cracks which develop in the tags tend to trap net twine and cause damage to the gear. Fishermen suggested that NMFS explore the use of crimp-on leads or a seamless napkin ring type attachment made from a strong polymer. This construction would still go over the bridle but would have a minimum of unnecessary surface area/projections to get hung up in the mesh.

NMFS and USCG Enforcement staff noted that the tagging requirement, which includes a unique series of tag numbers assigned to an individual vessel, is not easily enforced at sea. However, there would still be some value in encouraging compliance. Fishermen suggested that random at-sea enforcement would increase the level of compliance significantly. Pat Fiorelli of the of the New England Fishery Management Council (NEFMC) staff informed the TRT that enforcement of the net caps through the tag requirement is expected to be incidental to other enforcement activities during a USCG boarding. LCDR Mike Germinario of the Fifth Coast Guard District suggested that the tags would be more useful to boarding officers at sea if they included information indicating that a net was certified and was being fished in the right area.

In cases where a vessel is fishing for monkfish and could therefore have up to 160 tags, it would be difficult to determine whether a vessel was in compliance with the HPTRP regulations during the time when only 80 nets are allowed under the HPTRP for large mesh gear. Fishermen may also be uncertain which of their 160 tags they should put on the nets during the HPTRP restricted period. Fishermen suggested that, in such cases, the tags could be doubled up during the HPTRP period, thereby allowing the Coast Guard to easily determine whether the large mesh gear is in compliance.

NMFS informed the TRT that it would take the above discussion into consideration in deciding how to proceed with the net tagging requirement in the HPTRP. If a decision is made to search for a different material for the tags, it is unlikely that the program would be ready for implementation during the winter of 2000-2001.

G. Reflective Nets

Don King of Homeward Bound Twine Division (gillnet supplier), reported on a series of small experiments in Canada (Bay of Fundy) and in the Eastern Atlantic (Scandinavia) using enhanced acoustically reflective gillnet mesh to explore its potential for porpoise bycatch reduction. The

theory behind this gear modification is that the density of the traditional twine is very close to that of seawater, while the enhanced twine would be more likely to reflect an acoustic signal with sufficient strength to be detected by an echolocating harbor porpoise. Mr. King is a member of the Gulf of Maine TRT and has been working with materials chemists and mesh manufacturers to develop additives that would enhance the acoustic reflectivity of the twine used in weaving the mesh. A twine additive consisting of barium sulfate provides a six-fold increase in density. He indicated that, in both experiments, reflective nets appeared to reduce the take of harbor porpoise relative to that which has been recorded in traditional nets. In addition, the catch of the target fish species in Canada was 95% of that of the conventional netting, so the fishability was apparently comparable to that of traditional gear.

It was difficult to assess fishability results from the Eastern Atlantic study as the nets may not have been rigged in a manner that was optimal for testing the twine's reflective properties without interference from other factors such as the amount of floatation. Mr. King indicated that additional testing in an area of greater sampling power such as the Gulf of Maine was needed. He also noted that the following questions need to be answered to further refine the development of reflective netting as a porpoise bycatch reduction tool:

- Is small mesh more reflective than large mesh given equal twine size/type?
- Should reflective material be included in all the netting or interspersed with conventional netting?
- Which chemical additive provides the best reflectivity?
- What is the reflectivity detection threshold of the harbor porpoise?
- What adjustments may be necessary to ensure that the net can fish well for the various commercial target species and still achieve porpoise bycatch reduction?

Mr. King indicated that some of the information to refine the product could be obtained in laboratory studies. He is exploring different filler types and ways to make the reflective twine softer. He also noted that recordings of harbor porpoise sound production in the vicinity of the experimental nets in the Bay of Fundy would be forthcoming from one of his collaborators. This information might provide insight into actual porpoise behavior around the experimental nets.

The Team expressed enthusiasm about the potential for use of reflective netting in the HPTRP. The initial research summarized above suggests that this gear modification may help to reduce takes of harbor porpoise. The TRT agreed that it was critical to obtain further information on the fishability of reflective gillnet material in comparison with standard gear as soon as practicable. During the calendar year 2001, several of the Mid-Atlantic gillnet fishery representatives on the TRT will work cooperatively with their State TRT representatives to conduct an initial evaluation.

The recommendation provided below addresses a possible approach for how best to proceed with initial experimental work to further investigate porpoise bycatch reduction potential:

<u>The TRT recommends</u> that, concurrent to these efforts, NMFS and the Gulf of Maine TRT consider moving forward with an experiment to test the effectiveness of reflective gillnet material in reducing harbor porpoise entanglement. The New England experiment should be conducted in a manner similar to prior experimental fisheries studies undertaken by NMFS to test the efficacy of pingers in New England, i.e., (a) a certain number of takes are allocated in advance to the experiment, (b) takes during the experiment are extrapolated based only on landings attributable to the experiment, and (c) the extrapolated estimate from the experiment is then added to the extrapolated estimate from fishing trips outside the experimental area to complete the total mortality estimate from observed takes for that year.

The New England study should be a full-fledged experiment conducted according to standard scientific protocols. There may also be the need to undertake laboratory testing to refine the material utilized in the reflective netting.

<u>The TRT recommends that</u>, if the reflective net experiment in New England yields promising results for reducing harbor porpoise interaction, then NMFS should work cooperatively with the MATRT to evaluate a strategy that would include the future use of reflective nets in the Mid-Atlantic component of the HPTRP.

Additional funding sources are critical since the current year s NMFS funding is already earmarked, and it is unlikely that funding could be found from other areas of the NMFS FY01 budget. Time is of the essence to conduct an experiment that could subsequently lead to a strategy that could be implemented.

<u>Accordingly, the TRT proposes</u> to establish a subgroup to assist in identifying funding opportunities for various experiments and related studies on reflective netting. Options include a number of public and private sources.

<u>Agenda Item 5 -- Enforcement Report</u>

Special Agents Jeff Radonski and Logan Gregory of NMFS Enforcement informed the team that the primary duty of the enforcement agents is to utilize the regulations to enforce compliance and identify violations. For actual at-sea identification of violations and boarding of vessels to be investigated, the agency relies on the U. S. Coast Guard in federal waters and state fisheries patrol officers in state waters. The role of the enforcement arm of NMFS is to investigate reports of suspected violations from the data collected both at sea and on land which will be reviewed by the enforcement attorneys for potential legal action. One of the protected resources investigations this year concerned evidence collected from stranded turtles after an unusually

high number of strandings in the winter of 1999-2000. Based upon the information obtained from the investigation, NMFS implemented a temporary emergency closure of the component of the Mid-Atlantic coastal gillnet fishery believed to be responsible for the strandings.

Agent Radonski described the challenges involved in enforcement. For example, with regard to the pinger specifications required in the HPTRP, it would be easier to look at fewer variables, *i.e.*, having pingers or not vs. knowing if pingers are functioning at a particular decibel level. Testing for a required sound level would require having a calibrated instrument. He also noted that the ideal enforcement data for documenting non-compliance with gear restrictions includes evidence while fishing is being conducted at sea. Information obtained from inspecting gear when the vessel is tied to the dock is significantly less valuable for the attorneys in making and prosecuting a case.

Another important aspect of promoting compliance and effective enforcement of regulations is to craft definitions that are clear and consistent throughout all take reduction plans and fishery management plans. It would also be useful for gear experts to accompany the USCG boarding officers on missions to assist in hands-on interpretation of the complex regulations.

LCDR Germinario reinforced the need to write regulations that can be easily implemented in the field. He advised the TRT to consider steps that would have to be taken by the Coast Guard to determine whether the fisherman is in compliance when they develop their regulations. For example, it might be feasible to request that a fisherman pull up one net, but not to pull up all his nets. In addition, LCDR Germinario noted that equipment used to test pingers at sea would have to be certified to be durable and safe for use by boarding officers at sea. The USCG has an R&D center that could be of assistance with the development of testing equipment.

With regard to NMFS policies on using observer data for enforcement purposes, Meggan Engelke-Ros (an attorney with the NOAA General Counsel s Office of Enforcement and Litigation) stated that she had recently used observer data for an MMPA case in the Pacific. She noted that this is the least preferable option because of potential negative implications for the observer program. Enforcement boardings separate from observer trips are less problematic and therefore likely to help make stronger cases.

Agenda Item 6 -- Other Plans that Interface with the Harbor Porpoise TRP

A. Federal Fishery Management Plans

Rich Seagraves of the Mid-Atlantic Fishery Management Council (MAFMC) staff provided an overview of the federal FMPs for Spiny Dogfish and Monkfish. He noted that he could not predict whether there would be any further changes enacted in 2001 for either FMP. However, if the plans are implemented as currently projected, there would likely be a phase-out of these fisheries due to the degree of restriction already included in the FMP for the remainder of the

rebuilding periods. (See Attachment C for further information on these FMPs.)

B. Interstate Fishery Management Plans

Tina Berger of the ASMFC reported on the interstate FMPs for shad, menhaden, spiny dogfish, striped bass, and weakfish. The main item of interest for the TRT is that the Shad FMP includes a phase-out of the ocean intercept fishery including a 40% effort reduction by January 1, 2003, and elimination of the fishery by January 1, 2005.

The Atlantic Menhaden fishery is not fully utilized at the current level of fishing effort, so there is room for expansion of effort. The bait fishery component has become increasingly more important from North Carolina to New England.

FMP restrictions on the spiny dogfish fishery in state waters are anticipated, although the degree to which the interstate FMP will be complementary to the federal one is unknown at this point. With regard to the weakfish fishery, effort may expand in this fishery to utilize the allowable harvest, which has recently been increased.

Effort shifts. The TRT had a brief discussion of effort shifts resulting from current FMP regulations and the likely alternative fisheries. With regard to gillnet gear, alternatives are limited but may include croaker, mackerel, and weakfish. Some of the gillnet vessels may elect to expend more effort with pot gear for such species as sea bass or conch. In any case, expansion into other target species is usually limited by market value and other economic viability factors.

(See Attachment C for further information on interstate FMPs.)

C. Coordination of Management Efforts for Fisheries and Protected Resources

The TRT discussed the advantages of an integration of the HPTRP restrictions with FMP measures to address both the need to acknowledge the benefits of FMP restrictions and the uncertainty of relying only on FMP restrictions for continued porpoise bycatch reduction. NMFS staff reminded the TRT that the closures have to be considered on a case-by-case basis for potential benefits to both fish stocks and protected resources. Additive closures may be necessary in some cases to meet the objectives of both the TRPs and FMPs.

The TRT believes that coordination is critical to limit unnecessary economic impacts to the fishing industry, to maximize the potential benefits of FMP closures on reducing harbor porpoise take, and to avoid implementing FMP measures that may increase harbor porpoise bycatch. The goal is to achieve a well-coordinated, reliable strategy that is based on the best available data and also takes into consideration both fisheries management and take reduction objectives.

The TRT concluded that it was premature to recommend an integration course of action at this time. However, they recommended the following approaches for improving coordination:

***The TRT recommends* that NMFS, in coordination with the Councils, the ASMFC, and the States, should devise a process for calculating the effects of the implementation of FMPs and other relevant plans on harbor porpoise bycatch. This information should be synthesized and provided as input to assist the TRT in its ongoing evaluation of progress in further reducing harbor porpoise take.**

***The TRT also recommends* that NMFS coordinate with the Councils and the Commission regarding proposed changes to the HPTRP.**

***The TRT requests* that the Mid-Atlantic States provide NMFS with the most recent available detailed commercial gillnet data quantifying landings and effort by geographical region during the months of December-April. This information will be necessary for NMFS to quantify FMP impacts on harbor porpoise bycatch for consideration by the TRT at the next meeting.**

***The TRT acknowledges* that the NEFMC and ASMFC have established committees dealing with protected species issues, and the *TRT recommends* that the Mid-Atlantic and the South Atlantic Fishery Management Councils establish similar committees that include NMFS Protected Species Division representation. The TRT facilitator will prepare a letter to each of these Councils and to NMFS to transmit this recommendation.**

D. Atlantic Large Whale Take Reduction Plan

Chris Mantzaris of the NMFS/Northeast Regional Office reported that the Atlantic Large Whale TRT is now divided into three subgroups (New England, Mid-Atlantic, and Southeast). The current regulations implementing the Atlantic Large Whale Take Reduction Plan impact the same gillnet fisheries regulated by the HPTRP. Each subgroup is working on different sets of proposals that pertain to the geographic areas of concern. The Whale TRT is facing serious challenges, since the northern right whale is critically endangered, with serious injury/mortality incidental to commercial fisheries that continues to exceed the PBR, which is now set at zero. Therefore, all takes must be avoided. NMFS is in the final stages of publishing an interim final rule to implement the short-term recommendations of the Whale TRT from its February 2000 meeting. This rule is expected to be effective early in 2001, but is not likely to affect porpoise bycatch. NMFS is also working on a proposed rule to implement additional Whale TRT recommendations that could have a more substantive effect on gillnet effort. NMFS expects to re-convene the Whale TRT in the spring.

The MATRT questioned whether there is appropriate representation on the Whale TRT from the Mid-Atlantic region. NMFS staff informed the Team that the ASMFC, Mid-Atlantic states, and industry representatives from the area were originally invited in 1996 but declined to participate

at that time. The Team noted that interest has increased and that the current membership may not reflect this interest. Chris Mantzaris of NMFS agreed to check further regarding this representation.

E. Bottlenose Dolphin Take Reduction Plan

Diane Borggaard reported that NMFS has started to develop a proposed list of take reduction team members for the team which will advise NMFS on preparation of a take reduction plan for the Western North Atlantic coastal bottlenose dolphin stock. In addition, NMFS has begun to contact states for various fisheries information for use by the Bottlenose TRT, and has been considering options for forming the team such as which fisheries to have represented and what the geographic range should be. The NMFS Science Centers have also been examining the available data to clarify stock structure and develop a revised PBR. NMFS presented preliminary results to the SRG, which advised against using these results as they were not yet scientifically defensible. Based on this recommendation, NMFS will be re-analyzing the data to develop more statistically reliable estimates. NMFS plans to convene the bottlenose dolphin TRT during early 2001.

Agenda Items 7 & 8 -- Approaches for Continuing to Reduce Bycatch & Year 2000-2001 Recommendations

The TRT spent the remainder of the session discussing possible recommendations regarding changes to the HPTRP which could provide progress toward ZMRG. One of the issues discussed was the importance of heightening awareness among fishermen regarding strategies for avoiding harbor porpoise interaction, including the importance of compliance with current regulations. In general, fishermen felt the current level of NMFS outreach with regard to the HPTRP was insufficient. They would like to be given more information on the interpretation of current regulations as well as plans for the future. This information enables them to be proactive with regard to business decisions as well as involvement in HPTRP planning. A specific suggestion for the outreach curriculum is that fishermen be encouraged not to set during bad weather, as this is likely to increase soak time and may therefore increase the potential for takes of harbor porpoise.

Porpoise takes have been recorded in Mid-Atlantic gillnet subfisheries for which the TRT has not yet made regulatory recommendations to NMFS. Thus, outreach with these sectors is a priority. Convening fishermen workshops in advance of a crisis heightens awareness and elicits possible new approaches or enhancements of existing strategies that may help to avert an increasing trend in bycatch. Accordingly, the TRT made the following recommendation:

<u>The TRT recommends</u> that NMFS provide outreach to fishermen in the tiny/small mesh fisheries regarding fishing practices that may decrease the potential for takes. This outreach could be conducted in conjunction with the information that will be disseminated in upcoming meetings on bottlenose dolphins. The TRT will subsequently evaluate the merit of instituting mandatory workshops.

Based upon the current information regarding observed takes in the Mid-Atlantic, the apparent success in achieving bycatch rates below PBR, and the uncertain role of FMP closures in porpoise bycatch reduction, the TRT could not come to consensus on any further restrictions on fishing effort. However, as described above, the TRT agreed upon recommendations regarding priorities for gear modification research, funding support, and monitoring of takes in the small mesh fisheries and recreational fisheries which the Team hopes will demonstrate ongoing diligence in meeting the objectives of the MMPA.

Chris Mantzaris of NMFS indicated that he could support the TRT s decision not to recommend any modifications to the regulations at this time given the current level of information available regarding observed takes in the Mid-Atlantic, confusion regarding the sink/drift definitions, and progress to date in reducing bycatch to below PBR. Nevertheless, he urged the group to provide input to NMFS on contingency or default measures that might be undertaken should there be unanticipated additional observed takes which might indicate that bycatch was not staying below PBR -- and also for potential incorporation into a long-term plan. These strategies could include closures or gear restrictions on subfisheries. Without this input, NMFS might not have sufficient time to convene the TRT before it was necessary to react to increasing bycatch. However, he reaffirmed that NMFS would make every effort to consult with the TRT prior to implementing new regulations in a manner as consistent as practicable with the TRT s recommendations (from this meeting) regarding providing input into proposed rulemaking for the HPTRP.

<u>Agenda Items 9 & 10 -- Process Recommendations & Next Meeting</u>

The Team discussed the option of forming an executive committee with whom NMFS could confer between meetings or follow up on action items. There were concerns expressed about whether a representative group could be identified and the extent of decision-making authority that might be given to the group. The TRT decided not to form an executive committee at this time, but urged NMFS to continue its present approach of contacting individual members informally. In addition, the TRT will also continue to recommend the formation of subgroups to meet on an *ad hoc*, as needed basis.

The Team did not have time to discuss other process recommendations or to schedule the next meeting. NMFS was urged to propose meeting dates that would better coincide with the completion of relevant data analyses and with Council and Commission decision-making regarding fishery closures. Fishing seasons should also be taken into consideration.

The meeting adjourned at 1 p.m.

ATTACHMENT A

November 28-30, 2000, Mid-Atlantic Take Reduction Team Meeting Participants

MATRT Members/Alternates

Sue Barco
Virginia Marine Science Museum
Tina Berger
Atlantic States Marine Fisheries Comm.
Joe DeAlteris
University of Rhode Island
Gordon Elliott
NC fisherman
Ed Elwell (alternate for Robert Munson)
DE fisherman
Pat Fiorelli
New England Fishery Mgmt. Council
Lew Gillingham
Virginia Marine Resources Commission
Bruce Halgren
NJ Div. of Fish, Game, and Wildlife
David Laist
Marine Mammal Commission
Rick Luedtke
NJ fisherman
Rick Marks
NJ fishery representative
Dave Martin
MD fisherman
Bill McLellan
Univ. North Carolina - Wilmington
Roy Miller
DE Division of Fish and Wildlife
Red Munden
NC Division of Marine Fisheries
Jeff Oden
NC fisherman
Bill Outten
MD Dept. of Natural Resources
Rich Seagraves
Mid-Atlantic Fishery Mgmt. Council
Leonard Voss
DE fisherman
Rob West
NC fisherman
Nina Young
Center for Marine Conservation
Sharon Young
The Humane Society of the United States
Chris Zeman
American Oceans Campaign

NMFS Attendees

Diane Borggaard, *Southeast Region*
Winnie Chan, *Northeast Region*
Kevin Collins, *General Counsel Northeast*
Meggan Engelke-Ros, *GCEL*
Logan Gregory, *NMFS Enforcement*
Emily Hanson, *Ofc. of Protected Resources*
Dan Hytrek, *General Counsel Fisheries*
Pat Kurkul, *Northeast Region*
Gregg Lamontagne, *Northeast Region*
Chris Mantzaris, *Northeast Region*
Debi Palka, *NE Fisheries Science Ctr.*
Jeff Radonski, *NMFS Enforcement*
Marjorie Rossman, *NE Fish. Science Ctr.*
Kim Thounhurst, *Northeast Region*
Dave Ulmer, *Fishery Statistics Office*

Facilitators

Alana Knaster, *The Mediation Institute*
Dale Schafer, *The Mediation Institute*

Other Attendees

Mike Germinario, *USCG Fifth District*
Don King, *Homeward Bound Twine*

ATTACHMENT B

Background Documents Distributed Prior to and During Meeting

- Draft agenda
- Mid-Atlantic Harbor Porpoise Take Reduction Team Official Member List
- Mid-Atlantic Take Reduction Team Organizational Protocols (Resolve)
- Mid-Atlantic Take Reduction Team Organizational Protocols -- Revised for TRT Consideration (TMI 2000)
- Genetic Structure of Harbour Porpoise, *Phocoena phocoena,* Populations in the Northwest Atlantic Based on Mitochondrial and Nuclear Markers (Rosel *et al.* 1999)
- Bayesian Methods for Stock-Mixture Analysis from Genetic Characters (Pella and Masuda 2000)
- Total Fishery-related Mortality Estimate for the Gulf of Maine/Bay of Fundy Harbor Porpoise Stock During 1999 (NMFS, May 2000)
- October 27, 2000, cover letter to Sharon Young and attached memorandum entitled Preliminary estimates of harbor porpoise bycatch during January-May 2000"
- 2 4th Northeast Regional Stock Assessment Workshop (NMFS, October 1997)
- Mid-Atlantic Harbor Porpoise Take Reduction Team January 13-14, 2000, Final Meeting Summary (Resolve 2000)
- Proposed rule to adjust Delaware Bay HPTRP exemption line (65 FR 64415; October 27, 2000)
- Harbor Porpoise Take Reduction Plan Final Rule (63 FR 66464; December 2, 1998)
- Harbor Porpoise Take Reduction Plan Final Rule correction notice (63 FR 71041; December 23, 1998)
- Final MMPA List of Fisheries for 2000 (65 FR 24448; April 26, 2000)
- Abundance of the Gulf of Maine/Bay of Fundy Harbor Porpoise Based on Shipboard and Aerial Surveys During 1999" (Palka 2000)
- Draft Harbor Porpoise Stock Assessment Report Chapter (NMFS, September 2000)
- Did the Reduction Plan Reduce the By-Catch? (NMFS, November 2000)
- Characteristics of hauls with porpoise takes and not targeting monkfish and dogfish (NMFS, November 2000)
- Overview of Harbor Porpoise Stock Assessment (NMFS, November 2000)
- Methodology Used to Estimate By-Catch 1999-2000 (NMFS, November 2000)
- Preliminary 1999 Observer Coverage of Sink Gillnet Fisheries (NMFS, November 2000)
- Probability of Detecting a Take (NMFS, November 2000)
- Table 1 & Etc. with landings and fishery gear characteristics (NMFS, November 2000)
- Progress Report on Team Recommendations and Related Issues (NMFS, June 2000)
- Field Testing of Acoustic Reflective Gillnets in the Bay of Fundy- Potential Mitigative Tool to Reduce Harbour Porpoise By-Catch (Trippel *et al.* November 2000)
- NMFS Sustainable Fisheries Division handout: Marine Mammal Closed Area Regulations
- ASMFC Protected Species Subcommittee conference call summary (May 2000)
- Public hearing document for Addendum V to Amendment 5 of the FMP for Atlantic Striped Bass (ASMFC 2000)

- ASMFC news release on emergency dogfish action (August 2000)
- Spiny Dogfish FMP Now in Effect (NOAA)
- Judge Upholds Federal Dogfish Plan (August 3, 2000) (NOAA)
- Spiny Dogfish Closure (NOAA)
- Period 2 Spiny Dogfish Closure (NOAA)
- Emergency Rule for Spiny Dogfish (NOAA)
- Monkfish Stock Assessment and Fishery Evaluation (SAFE) Report
- Guide to the Federal Management Regulations for Monkfish
- Monkfish Fishery Management Plan Question and Answer Fact Sheet (NOAA)
- Additional Monkfish Management Measures Effective May 1, 2000 (NOAA)
- Monkfish Regulations Approved (NOAA)
- 2000 Review of the Atlantic States Marine Fisheries Commission Fishery Management Plan for Weakfish (October 2000)
- 2000 Review of the Atlantic States Marine Fisheries Commission Fishery Management Plan For Shad and River Herring (September 2000)
- Entanglement and Mortality of Bottlenose Dolphins, *Tursiops truncatus*, in Recreational Fishing Gear in Florida (Wells *et al.* 1998)
- Unusual Deaths of Two Free-Ranging Atlantic Bottlenose Dolphins Related to Ingestion of Recreational Fishing Gear (Gorzelany 1998)
- Harmful Human Interactions with Bottlenose Dolphins From East Florida: Evidence From Strandings, 1992-1999" (Stolen *et al.* draft)

ATTACHMENT C

Further Information on the Current Status of Fishery Management Plans that Interface with the Harbor Porpoise Take Reduction Plan

Federal Fishery Management Plans

Spiny Dogfish. The Spiny Dogfish FMP became effective on April 3, 2000. The FMP was adopted jointly by the Mid-Atlantic and New England Fishery Management Councils. For the 2001 fishing year, which begins on May 1, the commercial quota has been set at 4 million pounds, to be divided between two semi-annual quotas which roughly match the season that dogfish are in New England (Period 1) and then the Mid-Atlantic (Period 2). There will be a 600-pound trip limit for Period 1 and a 300-pound trip limit for Period 2. When the semi-annual cap is about to be reached, NMFS will publish a notice in the *Federal Register* indicating when the fishery will close. The quota applies to federal permit holders whether they are fishing in state or federal waters.

The Dogfish FMP requires mandatory reporting of fishing effort data by both federally-permitted vessels and federally-permitted dealers. Vessel trip reports from federally-permitted vessels are submitted on a monthly basis, and federally-permitted dealer reports are submitted on a weekly basis. (Additional effort data from state waters is reported to NMFS according to a schedule that varies from state to state.)

Fishing for this species will be reduced over time, ending in a bycatch-only fishery as the strategy for re-building the stock. The FMP was challenged but recently upheld by the Federal District Court in Boston.

Monkfish. The Monkfish FMP was implemented on November 8, 1999, and currently is in Year 2 of a four-year effort reduction program. There will be a major review in Year 3 prior to instituting Year 4 default measures which would result in a prohibition on directed fishing.

The Monkfish FMP has a northern and southern management area with effort and trip limits as well as mesh size and gear restrictions. Vessels may not deploy more than 160 nets; there is also a net tagging requirement for all federal permit holders.

Mr. Seagraves indicated that there were no changes recommended for Year 3; however, he could not predict what would occur in Year 4. One must assume that fishing will continue to be phased out based upon stock status to date.

Interstate Fishery Management Plans

American Shad. The shad fishery is managed under Amendment 1, and there are no specific coastwide minimum fish size or net/twine size requirements. The individual states develop and

implement state-specific plans within fishing mortality targets and recreational bag limits established by the ASMFC in the plan. The plan calls for a five-year phase-out of ocean intercept fisheries, beginning January 1, 2000. States must achieve at least a 40% reduction in effort in the ocean intercept fishery by January 1, 2003, with total closure of the fishery by January 1, 2005.

Atlantic Menhaden. The fishery is currently managed under the 1992 revision to the 1981 FMP with Amendment 1 in the final stages. There are three primary fisheries as follows: the South Atlantic summer fishery, the Chesapeake Bay summer fishery, and the Mid-Atlantic fishery, which catches mostly Age 3 fish. The landings for 1999 are 30% below the 1998 harvest -- possibly due to the consolidation of two Virginia processing plants and the reduction in the number of fishing vessels in Virginia. The bait fishery has become increasingly more important from North Carolina to New England.

Spiny Dogfish. There is no interstate FMP for dogfish yet, so the AMSFC chose to take emergency action to address the overfishing problem with this stock. As of August 22, 2000, the Atlantic coastal states waters are closed to harvest, landing and possession of spiny dogfish. The emergency action ends in late February 2001 and may be extended for two additional periods of up to one year each. The FMP development will begin in early 2001 with possible adoption in the fall. An option to be considered is a constant harvest strategy.

Striped Bass. As of November 29, 2000, striped bass are managed under Addendum V to Amendment 5 to the FMP, which addresses 2001 fisheries and possibly 2002 fisheries. States may choose to either maintain currently standing regulations or revert back to their 1998/1999 regulations. Each state develops its own plan, which sets regulations for its commercial and recreational fisheries.

Weakfish. Under Amendment 3, there is a required harvest reduction strategy designed to recover weakfish over a five-year period with a plan goal to restore historic age and size structure. Trawl gear is the dominant gear type for this species, then gill nets. The Plan will be amended in 2001/2002 to revise the assessment and management reference points. This will have implications for commercial and recreational fisheries. As the stock has grown, there may be some increase in harvest allowed.

ATTACHMENT D

November 2000 Mid-Atlantic Take Reduction Team Consensus Recommendations**

MATRT 1 (Page 5): the TRT recommends that NMFS convene a subgroup of TRT members on fishing effort and gillnet gear definitions to advise NMFS regarding the transition from the old data format to the new ACCSP format and the ramifications for HPTRP monitoring.

MATRT 2 (Page 5): the TRT recommends that NMFS investigate and apply appropriate analyses to estimate bycatch in fisheries where the catch rates are low or are considered a rare event, *i.e.*, the delta method as explained by NEFSC staff.

MATRT 3 (Page 7): the TRT recommends that NMFS increase funding for the observer program to cover at least 6% of overall gillnet fishing effort in the Mid-Atlantic region.

MATRT 4 (Page 7): the TRT recommends that NMFS focus additional observer coverage in those areas where take appears to be a problem (as suggested by stranding data).

MATRT 5 (Page 7): the TRT recommends that the observer program institute procedures to ensure that tissue samples and/or whole carcasses are obtained in the event of any observed harbor porpoise take at sea.

MATRT 6 (Page 10): The TRT recommends that, when and if NMFS observes a harbor porpoise take in a tiny mesh (less than or equal to 5.0 mesh) fishery, then the details of such take should be provided as soon as possible to the TRT for their consideration. If a second take event occurs, exceeding the 2000 level of non-extrapolated takes, then NMFS should convene a meeting of an appropriate subgroup of the MATRT to determine if focused fishermen workshops are warranted in the problem area(s). If additional takes occur, NMFS should convene the full TRT to address the issue.

MATRT 7 (Page 11): the TRT recommends that NMFS and the States continue investigations to quantify interactions between recreational gear and harbor porpoise and bottlenose dolphins.

MATRT 8 (Page 11): The TRT recommends that stranding network members be trained in a standardized fashion with regard to identifying and recording signs of fishery interactions and differentiating between various gear types where possible. Progress should be reported at the next MATRT meeting.

MATRT 9 (Page 12): the TRT Recommends that NMFS utilize several approaches for enhancing the ability of the TRT to provide input on the development of regulations pertaining to the Harbor Porpoise Take Reduction Plan (HPTRP). The TRT prefers that NMFS obtain input prior to the issuance of a Notice of Proposed Rulemaking (NPR) either by providing draft language for the TRT to review as part of the annual meeting and/or by convening the full team for the purpose of reviewing a proposed strategy or NPR. This consultation would take place in

person or by conference call. The last, but least preferable option, would be to mail a copy of the NPR to all team members and convene the Team during the public comment period.

MATRT 10 (Page 14): the TRT recommends that NMFS and the Gulf of Maine TRT consider moving forward with an experiment to test the effectiveness of reflective gillnet material in reducing harbor porpoise entanglement.

MATRT 11 (Page 14): the TRT recommends that, if the reflective net experiment in New England yields promising results for reducing harbor porpoise interaction, then NMFS should work cooperatively with the MATRT to evaluate a strategy that would include the future use of reflective nets in the Mid-Atlantic component of the HPTRP.

MATRT 12 (Page 15): the TRT proposes to establish a subgroup to assist in identifying funding opportunities for various experiments and related studies on reflective netting. Options include a number of public and private sources.

MATRT 13 (Page 17): the TRT recommends that NMFS, in coordination with the Councils, the ASMFC, and the States, should devise a process for calculating the effects of the implementation of FMPs and other relevant plans on harbor porpoise bycatch. This information should be synthesized and provided as input to assist the TRT in its ongoing evaluation of progress in further reducing harbor porpoise take.

MATRT 14 (Page 17): the TRT recommends that NMFS coordinate with the Councils and the Commission regarding proposed changes to the HPTRP.

MATRT 15 (Page 17): the TRT requests that the Mid-Atlantic States provide NMFS with the most recent available detailed commercial gillnet data quantifying landings and effort by geographical region during the months of December-April. This information will be necessary for NMFS to quantify FMP impacts on harbor porpoise bycatch for consideration by the TRT at the next meeting.

MATRT 16 (Page 17): the TRT recommends that the Mid-Atlantic and the South Atlantic Fishery Management Councils establish Protected Species Committees that include NMFS Protected Species Division representation. The TRT facilitator will prepare a letter to each of these Councils and to NMFS to transmit this recommendation.

MATRT 17 (Page 19): the TRT recommends that NMFS provide outreach to fishermen in the tiny/small mesh fisheries regarding fishing practices that may decrease the potential for takes. This outreach could be conducted in conjunction with the information that will be disseminated in upcoming meetings on bottlenose dolphins. The TRT will subsequently evaluate the merit of instituting mandatory workshops.

**Note: Recommendations are presented here in condensed form. See referenced page numbers in the body of the meeting summary for additional detail.

ATTACHMENT E

(Non-Consensus Proposal)

Recommendation to Ease Restrictions on the Shad Fishery

In its initial report to NMFS in 1997, the MATRT included gear specification recommendations which were intended to address the gillnet fisheries for spiny dogfish and monkfish. In the December 2, 1998, final rule, NMFS chose to use a definition of small mesh gear which included nets with mesh size from greater than 5.0 inches to less than 7.0 inches to address enforcement of the regulations. In addition to the dogfish fishery, this definition inadvertently impacted the ocean shad fishery which traditionally used 5.5 inch mesh and light twine. The original consensus agreement of the MATRT was to initially exclude small mesh gear for species such as shad. The current provision requiring the use of 0.81 mm twine significantly reduces shad harvest.

Current observer data indicates that fishing effort directed at dogfish with mesh sizes ranging from 5.0 inches to 5.5 inches represents less than 10% of the dogfish effort in the Mid-Atlantic coastal gillnet fishery. Given the added fact that the federal Dogfish FMP virtually eliminated a gillnet dogfish fishery in the Mid-Atlantic, there is very little potential for a take of harbor porpoise in the dogfish fishery in gear with mesh sizes between 5.0 inches and 5.5 inches.

To provide some relief for the inadvertent impact that the Mid-Atlantic component of the HPTRP had on shad fishermen, it is proposed that fishermen be allowed to utilize mesh sizes greater than 5.0 inches and equal to or less than 5.5 inches under the following conditions:

1. No overnight sets (nets to be out of the water from 10 p.m. to 3 a.m.)
2. Gear to be used only within 3 miles of the shoreline
3. Fishermen wishing to use this gear call in to NMFS prior to first use of gear
4. That this gear allowance be subject to review upon any observed or reported takes of harbor porpoise
5. This gear would be used from March 1 through April 30.
6. All other criteria existing for small mesh nets continue to apply

Based on the observer data currently available, no takes of harbor porpoise have been recorded by gill nets within the mesh range noted with soak duration of less than 24 hours. This regulatory modification could sunset on January 1, 2005, when the ocean gill net fishery is scheduled for elimination.